

### **Remarks/Arguments**

Claims 18 and 20 - 35 were pending in the application, and claims 18 and 20 - 35 are rejected. With this amendment, claim 24 has been amended and claim 36 has been added. Claims 18 and 20-36 are therefore pending in the application.

Claim 36 includes the feature "wherein the pregelatinized starch is applied before cleansing or rinsing said hair". Support for this amendment can be found, for example, in Example 1, at page 7, lines 26-30 and page 9, last paragraph, of the originally filed application. No new matter has been added.

Claim 24 has been amended for clarity and to make it consistent with claim 18. Such amendment, however, does not change the scope, breadth or limitation of this claim.

### **Response to Rejections based on GB 1,285,547 in view of Syed**

Claims 18, 20-22 and 25-34 stand rejected under 35 U.S.C. § 103(a) as unpatentable over British patent no. GB 1,285,547 ("GB '547") in view of EP 0 829 255 ("Syed"). Similarly, claims 18, 20-22 and 25-34 are rejected under 35 U.S.C. 103(a) as unpatentable over U.S. patent no. 6,344,183 ("Paul") in view of Syed. For at least the following reasons, Applicants submit that the Office has failed to present a *prima facie* case of obviousness based on the references as cited above.

The Office alleges that the starches of GB '547 when applied to wet or damp hair provides a film which can impart desirable properties such as body and smoothness. According to this reference, the compositions can be utilized as a hair setting composition and a crème rinse which is applied after the hair is washed/cleansed. As set forth at page 4, lines 54 of GB '547, it is "necessary that our novel hair setting composition is applied to the moistened hair whereupon the thus treated hair is subsequently set into any desired configuration and then dried so as to ultimately result in the deposition of a film upon the individual hairs of the user." Thus, the hair setting compositions of GB '547 are not applied to the user's hair before cleansing or rinsing

said hair, but rather are applied to hair after it has been cleansed so that the hair setting composition remains in on the hair.

Paul teaches the use of the formulations as hair fixatives and styling aids (col 8, lines 25-27), such as hair sprays and mousses, which are known in the art to be applied to the hair after washing or shampooing. The examiner alleges that Paul et al. teaches the use of a nonionically derivatized starch, such as those from high amylose corn starch. Paul, however, does not teach the use of these formulations for use as conditioners or to repair damage from chemical processing. The compositions of Paul are applied to hair post-washing or shampooing so that the hair cosmetic compositions remain on the hair.

In contrast to either GB '547 or Paul, Syed teaches the use of low molecular weight polyols and sugars to protect previously treated hair during further processing. The compositions are applied to the hair before or during the same chemical process. The examples of processes disclosed in this patent are bleaching, coloring, relaxing or permanent wave. Additionally, it is well known to those of ordinary skill in the art that polyols, sugars and starch hydrolysates are low molecular weight and afford humectant type properties. Therefore these materials act to absorb water from the air and thus moisturize and condition the hair by this mechanism. As disclosed in Syed, (see abstract), after the hair fibers are treated with the chemical treatment, Syed discloses "thereafter (c) rinsing the hair for a time sufficient to remove all chemicals from the hair." (emphasis added).

Applicants submit that it is improper for the Office to combine the teachings of GB '547 or Paul with Syed because the combination of either GB '547 or Paul with Syed would render change the principle of operation of the cited references and/or render them unsatisfactory for their intended purposes. That is, once the hair is cleansed, the hair formulations of GB '547 and Paul are designed to remain in the hair to provide the hair fixative and styling benefits for which they are designed. In contrast, the method of Syed requires rinsing the hair such that all chemicals are removed from the hair after chemical processing, after which time the hair may be normalized with a mild shampoo.

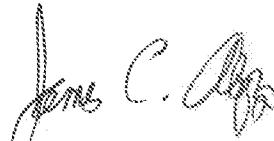
Thus, where the basic principles taught by GB '547 and Paul are to retain their respective compositions (actives) on previously cleansed hair. In contrast, the basic principle taught by Syed is to rinse off all of its chemical composition from the hair prior to rinsing and cleansing so as to remove any residual active ingredients. Accordingly, by combining GB '547 and Paul with Syed, Applicants submit that the combination of the two teachings would thus change the principle of operation of the prior art invention(s) being modified. Thus, Applicants submit that the teachings of the references are not sufficient to render the claims *prima facie* obvious. See M.P.E.P. § 2143.01(VI) (citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

Moreover, as recited in new claim 36, the method of the instant application relates to applying a pregelatinized amylose-containing starch based composition to the hair after the chemical process (in this case coloring) and before each washing (or shampooing) of the hair. As shown in the table in Example 4, the hair treated using the method of the instant invention for 10 cycles without additional coloring, provides superior color protection as compared to starches and polymers that do not contain amylose. Applicants submit, therefore, that it would not have been obvious to one of ordinary skill in the art at the time of Applicants' invention to apply the methods taught in GB '547 or Paul before the washing cycle, where in the polymers would be removed from the hair. In addition, in both GB '547 and Sayed, the starch-containing compositions are applied to the hair after the process to repair the damage and to condition the hair. It appears that neither Paul or Sayed teaches the method of applying the starch-containing formulations to the hair prior to washing for the purpose of providing the intended beneficial result, as shown in the instant invention. It is therefore clear that the cited references, either alone or in any combination do not teach the use of starches of the instant invention before the washing of the hair to protect the artificial coloring.

## **Conclusion**

In view of the amendments and arguments set forth above, Applicants respectfully submit that the pending application is now in condition for allowance. Notice to this effect is earnestly solicited.

Respectfully submitted,



James C. Abruzzo  
Reg. No. 55,890  
Attorney for Applicants

Akzo Nobel Inc.  
Legal, IP & Compliance  
120 White Plains Road, Suite 300  
Tarrytown, NY 10591  
(914) 333-7448